

15-CT-5271
PATENT

representation of a particular number x stored in a memory of a computing device utilizing the first degree polynomial in m .

IN THE CLAIMS

1. (once amended) A method for computing an approximation of a natural logarithm function comprising the steps of:

partitioning a mantissa region between 1 and 2 into N equally spaced sub-regions;

precomputing centerpoints a_i of each of the N equally spaced sub-regions, where $i = 0, \dots, N-1$;

selecting N sufficiently large so that, for each sub-region, a first degree polynomial in m computes $\log(m)$ to within a preselected degree of accuracy for any m within the sub-region, where m is a binary mantissa of a binary floating point representation of a number; and

computing a value of $\log(x)$ for a binary floating point representation of a particular number x stored in a memory of a computing device utilizing the first degree polynomial in m .

PLEASE ADD THE FOLLOWING NEW CLAIMS:

29. A method in accordance with Claim 1 further comprising using the approximation to process at least one image of an object of interest.

30. A computing device in accordance with Claim 15, said computing device further configured to use the value of $\log(x)$ to process at least one image of an object of interest.

Remarks

Claims 1-30 are now pending in this application. Claims 1-28 stand rejected. Claims 29 and 30 have been newly added. A fee calculation sheet for the newly added claims along with